

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Eduard BRUEHWILER et al.

Art Unit: [to be assigned]

Application No.: [to be assigned]

Examiner: [to be assigned]

Filing Date: [on even date herewith]

Attorney Ref. No.: 003-115

For: METHOD OF INSTALLING SPIRAL
THREADED INSERTS AND
INSTALLATION TOOL FOR CARRYING
OUT THE METHOD

PRELIMINARY AMENDMENT

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Prior to taking up this new patent application for action on the merits, please amend the application as follows.

IN THE CLAIMS:

Kindly rewrite Claims 1-18 and add Claims 19 and 20 as follows:

1. (Currently Amended) A method of installing spiral threaded inserts (19, 38), in which the method comprising:

inserting a first threaded insert (19, 38) is inserted into an installation tool (20) and is screwed

securing the first threaded insert in the installation tool to prevent the insert from falling out; and

screwing the first threaded insert into a tapped hole (18) by means of with the installation tool (20), characterized in that the first threaded insert (19, 38) is secured in the installation tool (20) to prevent it from falling out.

2. (Currently Amended) The method as claimed in claim 1, characterized in that the wherein each threaded inserts (19, 38) in each case have insert has a driving tang (40), in that, and further comprising:

securing the first threaded insert (19, 38) is secured in the installation tool (20) on the driving tang (40) to prevent it the first threaded insert from falling out; and in that

cutting off the driving tang (40) is cut off from the first threaded insert (19, 38) after the installation of securing the first threaded insert (19, 38).

3. (Currently Amended) The method as claimed in claim 2, characterized in that wherein the driving tang comprises a securing thread (28) which is fastened to the driving tang (40) is used for, and further comprising:

securing the first threaded insert (19, 38) in the installation tool (20), with the securing thread; and in that

removing the cut-off driving tang (40) is removed from the installed first threaded insert (19, 38) by means of with the securing thread (28).

4. (Currently Amended) The method as claimed in claims 1 to Claim 3, characterized in that further comprising:

placing the first threaded insert (19, 38) is brought into in a predetermined installation position during the insertion into the installation tool (20).

5. (Currently Amended) The method as claimed in claim 4, characterized in that further comprising:

firmly arranging a second threaded insert (33) is firmly arranged in the installation tool (20); and

orienting the first threaded insert (19, 38) to be installed being oriented, during the insertion into the installation tool (20), at said second threaded insert (33) relative to the predetermined installation position.

6. (Currently Amended) The method as claimed in one of claims 1 to 5 claim 1, characterized in that the installation of further comprising:

moving the first threaded inserts (19, 38) is effected insert through an inspection ports (12, 15); port; and in that the installation operation is monitored

optically monitoring the first threaded insert, in particular by means of a borescope (26).

7. (Currently Amended) An installation tool (20) useful for carrying out the method as claimed in claim 1, characterized by the tool comprising:

a shaft (21), on one having a first end of which including

first means (29; 30,...,34; 36, 39) for the anti-rotation retention and guidance of a threaded insert, (19, 38) and also

second means (28) for securing the first threaded insert (19, 38) in the first means (30,...,34; 36, 39) are arranged.

8. (Currently Amended) The installation tool as claimed in claim 7, characterized in that wherein the first means comprise comprises a head (29) having an elongated circular-

cylindrical bolt (30), which bolt (30) has, at the-a front end, a slotted section (36) for pushing the first threaded insert (19, 38) over itthe bolt.

9. (Currently Amended) The installation tool as claimed in claim 8, characterized in thatfurther comprising:

a hollow-cylindrical mounting sleeve having an internal thread;

a second threaded insert; and

wherein, below the slotted section (36), the bolt (30) is enclosed concentrically by athe hollow-cylindrical mounting sleeve (32) at a distance apart, and in that the mounting sleeve (32) has an internal thread, into which athe second threaded insert (33) is firmly screwed into the hollow-cylindrical mounting sleeve internal thread in such a way so that the first threaded insert (19, 38) pushed over the slotted section (36) abuts at thean end face against the second threaded insert (33) and is oriented at the second threaded insert (33).

10. (Currently Amended) The installation tool as claimed in claim 9, characterized in thatwherein the first and second threaded inserts (19, 38 and 33, respectively) are of the same type.

11. (Currently Amended) The installation tool as claimed in one of claims 7 to 10claim 7, characterized in thatwherein the second means comprisecomprises a securing thread (28) which is longitudinally passed through the installation tool (20) in the longitudinal direction, is led out of the installation tool (20) at the-a front end of the installation tool, (20) and can be connected to the first threaded insert (19, 38).

12. (Currently Amended) The installation tool as claimed in claim 11, characterized in thatwherein the first means comprisecomprises a head (29) having an elongated circular-cylindrical bolt (30), which bolt (30) has, at the-a front end, a slotted section (36) for pushing the first threaded insert (19, 38) over itthe bolt, in that the bolt (30) has including a central through-

hole (35), and ~~in that~~ the securing thread (28) ~~is passed~~ passes through the central through-hole (35).

13. (Currently Amended) The installation tool as claimed in ~~either of claims 11 and claim 12, characterized in that wherein~~ the securing thread (28) is made of a tear-resistant material, preferably nylon®, and has a diameter of ~~a few 1/10 mm, preferably about 0.4 mm.~~

14. (Currently Amended) The installation tool as claimed in ~~one of claims 7 to 13~~ ~~claim 7, characterized in that wherein~~ the shaft (21) ~~is composed of~~ ~~comprises~~ a plurality of tubular sections (211, 212, 213) which ~~are~~ arranged one behind the other and ~~are~~ releasably connected to one another.

15. (Currently Amended) The installation tool as claimed in claim 14, ~~characterized in that further comprising:~~

~~_____ a slot-shaped opening (25) extending in the longitudinal direction is provided in the a foremost section (213) of the shaft, through which slot-shaped opening (25) a borescope (26) when running inside the shaft (21) can be passed outward; and in that~~

~~_____ a supporting tube, (27) for supporting the borescope (26) when projecting from the shaft, (21) is arranged on the outside of the foremost section (213) in front of the opening (25).~~

16. (Currently Amended) The installation tool as claimed in claim 9, ~~characterized in that wherein~~ the mounting sleeve (32) ~~is designed~~ ~~configured and arranged~~ to be rotatable about the bolt (30) and ~~can to be~~ fixed in any desired rotary angle position by ~~fixing means (34, 37).~~

17. (Currently Amended) The installation tool as claimed in ~~one of claims 7 to 16~~ ~~claim 7, characterized in that further comprising:~~

~~_____ a driving tang arranged on the first threaded insert, configured and arranged to be cut off; and~~

~~_____ third means (28) are provided for securing a the driving tang (40) which is arranged on the first threaded insert (19, 38) and can be cut off.~~

18. (Currently Amended) The installation tool as claimed in claim 17, characterized in that the wherein the second means (28) are at the same time provided as comprises the third means.

19. (New) The method as claimed in claim 6, wherein monitoring comprises monitoring with a borescope.

20. (New) The installation tool as claimed in claim 16, further comprising: fixing means for rotationally fixing the mounting sleeve to the bolt.